

Serial No. 10/675,987  
Amdt. dated December 8, 2005  
Reply to Office Action of August 8, 2005

Docket No. YHK-0121

**Amendments to the Drawings:**

The attached drawing includes changes to Fig. 6. This sheet, which includes Fig. 6, replaces the original sheet including Fig. 6.

Attachment: Replacement Sheet (1)  
Annotated Sheet Showing Changes (1)

Serial No. 10/675,987

Docket No. YHK-0121

Amdt. dated December 8, 2005

Reply to Office Action of August 8, 2005

### **REMARKS/ARGUMENTS**

Claims 1-4, 11, 12, 15-22 and 25-28 are pending in this application. By this Amendment, the drawings, Abstract, specification, and claims 1, 2, 11, 12, 15-18 and 20 are amended, claims 27-28 are added, and claims 5-10, 13, 14, 23 and 24 are cancelled without prejudice or disclaimer. The drawings, Abstract, and specification are amended for clarification purposes. No new matter is added. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

#### **I. Allowable Subject Matter**

The Examiner is thanked for the indication that claim 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. New claim 27 is allowable claim 4 written in independent form, and thus new claim 27 should be in condition for allowance.

#### **II. Restriction Requirement**

Applicant maintains the traversal of the Restriction/Election Requirement set forth in the Patent Office Communication dated June 24, 2005. However, merely to expedite prosecution of the application, Applicant has cancelled non-elected claims 5-10, 13-14, 23 and 24 without prejudice or disclaimer to be pursued in a divisional application.

### **III. Informalities**

The Office Action objects to the drawings, specification, and claim 20 due to informalities. It is respectfully submitted that the amendments to the drawings, specification, and claim 20 are responsive to the Examiner's comments, and thus these objections should be withdrawn.

### **IV. Rejections Under 35 U.S.C. §102(b)**

The Office Action rejects claims 1-3, 11, 12, 21 and 22 under 35 U.S.C. §102(b) over Japanese Patent No. 2000063171 to Takenouchi et al. (hereinafter "Takenouchi"). The rejection is respectfully traversed.

Independent claim 1 recites a protective film of a plasma display panel, comprising a main component comprising magnesium oxide (MgO), and an addition of silicon (Si), wherein less than 500ppm of silicon is added to the main component to produce said protective film. Takenouchi neither discloses nor suggests such features.

Takenouchi discloses a polycrystalline Magnesium Oxide (MgO) vapor deposition material which includes a predetermined amount of carbon so as to provide for a uniform thickness across a front face of a dielectric layer of a plasma display panel (PDP) to protect it from sputtering during discharge. An MgO purity level is maintained at 99.90%, with 30ppm or less of carbon impurities, and 150 ppm or less of silicon and aluminum, in order to produce the desired vapor deposition characteristics. In order to minimize the amount of silicon and

Serial No. 10/675,987

Docket No. YHK-0121

Amdt. dated December 8, 2005

Reply to Office Action of August 8, 2005

aluminum impurities present in the MgO (as well as other impurities), a sintered compact pellet of 98% or more of polycrystal MgO is used as the base material, and a carbon level is maintained at a predetermined level to produce the desired deposition characteristics and an MgO film deposited with uniform thickness. Thus, any silicon in the resulting film is a fundamental component of the base MgO material, and the base MgO material is specifically selected to minimize or eliminate the presence of silicon in the resultant vapor deposition material. Therefore, as Takenouchi clearly teaches that a level of silicon (as well as other impurities) must be minimized or eliminated in order to produce the desired characteristics, Takenouchi neither discloses nor suggests an addition of silicon to a main component of MgO, as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 is not anticipated by Tankenouchi, and thus the rejection of independent claim 1 under 35 U.S.C. §102(b) over Takenouchi should be withdrawn. Dependent claims 2-3, 11, 12, 21 and 22 are allowable at least for the reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

The Office Action rejects claim 15 under 35 U.S.C. §102(b) over U.S. Patent No. 6,242,864 to Nakahara et al. (hereinafter "Nakahara"). The rejection is respectfully traversed.

Independent claim 15 recites, *inter alia*, wherein said protective film comprises a main component of magnesium oxide and an addition of a predetermined amount of silicon. Nakahara neither discloses nor suggests such features.

Nakahara discloses a plasma display panel, including a protective MgO film 18 coated on a dielectric layer 17 (see column 8, lines 24-29 of Nakahara, referred to by the Examiner). Nakahara merely discloses that the protective film 18 is made of MgO, and neither discloses nor suggests that the protective film 18 also includes silicon, let alone an addition of a predetermined amount of silicon, as recited in independent claim 15. Nakahara later discloses allowable concentrations of silicon in the range of 500 to 10,000 ppm for good quality, and 800 to 1000 ppm for best quality (see Figure 7 and column 10, lines 28-31 of Nakahara). However, this is actually a silicon compound such as silicon oxide or silicon monoxide (see column 10, lines 39-50 of Nakahara), and Nakahara neither discloses nor suggests an addition of silicon, as recited in independent claim 15. Accordingly, it is respectfully submitted that independent claim 15 is not anticipated by Nakahara, and thus the rejection of independent claim 15 under 35 U.S.C. §102(b) over Nakahara should be withdrawn.

#### **V. Rejection Under 35 U.S.C. §103(a)**

The Office Action rejects claims 15-20, 25 and 26 under 35 U.S.C §103(a) over Figures 1-4 of the present application in view of Takenouchi. The rejection is respectfully traversed.

Independent claim 15 recites, *inter alia*, wherein said protective film comprises a main component of magnesium oxide and an addition of a predetermined amount of silicon. As acknowledged by the Examiner in the remarks regarding independent claim 15, Figures 1-4 of the present application neither disclose nor suggest such features. Further, as set forth above, Takenouchi fails to overcome the deficiencies of Figures 1-4 of the present application.

Accordingly, it is respectfully submitted that independent claim 15 is allowable over the applied combination, and thus the rejection of independent claim 15 under 35 U.S.C. §103(a) over Figures 1-4 of the present application and Takenouchi should be withdrawn. Dependent claims 16-20, 25 and 26 are allowable at least for the reasons set forth above with respect to independent claim 15, from which they depend, as well as for their added features.

#### **VI. New Claims 27-28**

New claims 27-28 are added to the application. It is respectfully submitted that new claims 27-28 define over the applied prior art and meet the requirements of 35 U.S.C. §112. More specifically, claim 27 is allowable claim 4 written in independent form, and thus should be in condition for allowance. Further, new independent claim 28 recites, *inter alia*, wherein said protective film has between about 150 ppm and 300 ppm of silicon. It is respectfully submitted that this recitation of silicon content is outside the range of less than 150 ppm disclosed by Takenouchi for acceptable impurity levels, and thus independent claim 28 is allowable over Takenouchi. Further, this recitation is outside any acceptable range for silicon compound

Serial No. 10/675,987  
Amdt. dated December 8, 2005  
Reply to Office Action of August 8, 2005

Docket No. YHK-0121

content taught by Nakahara, and thus new independent claim 28 is also allowable over Nakahara.

## VII. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned, **JOANNA K. MASON**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
FLESHNER & KIM, LLP



Daniel Y.J. Kim  
Registration No. 36,186  
Joanna K. Mason  
Registration No. 56,408

P.O. Box 221200  
Chantilly, Virginia 20153-1200  
(703) 766-3701 DYK:JKM/ah

**Date: December 8, 2005**

\\fk4\Documents\2017\2017-109\72763.doc

**Please direct all correspondence to Customer Number 34610**



FIG.6

